SLOSS
INDUSTRIES
CORPORATION

3500 35th Avenue North • P.O. BOX 3527 BIRMINGHAM, AL 35207
PHONE: (205) 808-7712 FAX: (205) 808-7975 charlesjones@sloss.com

November 18, 2005

Mr. James Adams
Alabama Department of Environmental Management
P.O. Box 301463
Montgomery, AL 36130-1463

Re: Sloss Industries Corporation-Ariton Facility - Facility No. 604-0011;
Permit No. 604-0011; Diphenyl Isophthalate (DPIP) Process Air Permit Applications;
Fixed Roof VOC Storage Tanks, Vapor Pressure Less than 1.5 psia

Dear Mr. Adams:

Enclosed are completed ADEM air permit application forms 103, 105, 105 (public), and 108 pertaining to the above referenced DPIP process. The forms are submitted in duplicate. We consider this to be a proprietary process and Confidential Business Information. In addition to the ADEM forms, we have also included a field installation drawing for the unit. Also, included are the TANKS 4.0 emissions calculations for the storage tanks.

As per our previous discussions, this process will be performed in existing equipment. Furthermore, I have reviewed the sited ADEM and EPA regulations concerning VOC storage tanks, i.e., ADEM Sect. 6, 335-3-6-.03 and 40CFR 60, Subpart Kb and respectively. The vapor pressure of toluene is 0.43 psia at ambient temperature; and, the vapor pressure of isophthaloyl chloride is 0.00058 psia at ambient temperature. Both of which are less than the 1.5 psia required to install emissions control equipment. We request an evaluation for permitting requirements.

If the information provided to you is not sufficient, please contact me and we will be more than happy to provide any additional information you need. Thank you for your help in this matter.

Sincerely,

Charles A. Jones
Environmental/Safety Coordinator

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

AIR DIVISION

INSTRUCTIONS FOR COMPLETION OF

FACILITY IDENTIFICATION FORM ADEM 103

This form is to be completed in duplicate for each facility operated by your firm or institution in the State of Alabama. If permit application forms are not received at every facility of a firm or institution which has more than one facility, it is still the responsibility of the owner or operator to secure application forms and submit them.

Items 1-7: Self-explanatory

Item 8: There must be at least one copy (in duplicate) of Forms ADEM 104-438. The total number of each of these will depend on the number of air contaminant sources at the facility. Submission of some of the other forms may not be necessary. This can be determined from the instructions. Each form must be completed in duplicate, but the original and copy are to be counted as one form.

Item 9: Self-explanatory

Item 10: Any facility applying for either a Synthetic Minor Operating Permit (SMOP) or a Major Operating Permit should list each pollutant and its emission rate for the facility for which the application is submitted. Also, indicate whether each pollutant is major (emissions > 100 TPY for any criteria pollutants, emissions > 10 TPY for any single HAP, or emissions > 25 TPY for any combination of HAPs). The most recent air emissions inventory done for annual operating permit fees can be substituted for Item 10, provided it shows the totals for each pollutant in the inventory. Indicate in the space that the air inventory is attached if this option is chosen.

Item 11: Self-explanatory
PSD - Prevention of Deterioration
NSPS - New Source Performance Standards
NESHAP - National Emissions Standards for Hazardous Air Pollutants
Title I - Attainment and Maintenance of NAAQS
Title IV - Acid Rain
Title VI - Stratospheric Ozone and Global Climate Protection

Item 12: Identify and list any source or activity that will be considered insignificant (emitting less than 5 TPY of any criteria pollutant, 1000 lb/yr of any air toxic, or included in the insignificant activities list previously established by the Department). Supporting documentation, including calculations, should be submitted for each activity.

Item 13: Self-explanatory

Item 14: Indicate any actual emission test of air contaminants for any operations covered in this application.

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

AIR DIVISION

Facility Number | | | | - | | | | |

Do not Write in This Space

OPERATING PERMIT APPLICATION
FACILITY IDENTIFICATION FORM

1. Name of Firm or Institution: **Sloss Industries Corporation, Ariton Facility**

Facility Location

Street & Number: **187 Sloss Industries Road, Highway 51**

City: **Ariton** County: **Dale** Zip: **36311**

2. Name of Owner: **Sloss Industries Corporation**

Owner's Address

Street & Number: **3500 35th Avenue North**

City: **Birmingham** State: **Alabama** Zip: **35207**

Plant Owner's Telephone Number: **205-808-7801**

3. Name of Responsible Official: **Chuck Stewart**

Responsible Official's Address

Street & Number: **3500 35th Avenue North**

City: **Birmingham** State: **Alabama** Zip: **35207**

Responsible Official's Telephone: **205-808-7801**

4. Name of Plant Contact: **Mike Ziegler**

Title of Contact: **Plant Manager**

Plant Contact's Telephone Number: **334-762-2314**

5. UTM Coordinates: **3495857.79** N-S **621599.07** E-W

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6. Permit application is made for:

☐ Existing source (initial application)

☐ Modification

New source (to be constructed)

☐ Change of ownership

☐ Change of location

X Other (specify) Manufacturing process to be operated in existing equipment. Requires some modification.

Existing source (permit renewal)

If application is being made to construct or modify, please provide the name and address of installer or contractor

Sloss Industries Corporation

Telephone **334-762-2314**

Date construction/modification to begin _____ to be completed _____

7. Permit application is being made to obtain the following type permit:

X Air permit

☐ Major source operating permit

☐ Synthetic minor source operating permit

☐ General permit

8. Indicate the number of each of the following forms attached and made a part of this application: (if a form does not apply to your operation indicate "N/A" in the space opposite the form). Multiple forms may be used as required.

N/A	ADEM 104 - INDIRECT HEATING EQUIPMENT
2	ADEM 105 - MANUFACTURING OR PROCESSING OPERATION
N/A	ADEM 106 - REFUSE HANDLING, DISPOSAL, AND INCINERATION
N/A	ADEM 107 - STATIONARY INTERNAL COMBUSTION ENGINES
2	ADEM 108 - LOADING, STORAGE & DISPENSING LIQUID & GASEOUS ORGANIC COMPOUNDS
N/A	ADEM 109 - VOLATILE ORGANIC COMPOUND SURFACE COATING EMISSION SOURCES
2 N/A	ADEM 110 - AIR POLLUTION CONTROL DEVICE
N/A	ADEM 112 - SOLVENT METAL CLEANING
N/A	ADEM 438 - CONTINUOUS EMISSION MONITORS
N/A	ADEM 437 - COMPLIANCE SCHEDULE

9. General nature of business: (describe and list appropriate standard industrial classification (SIC) code(s)):

Specialty chemical manufacturing, SIC 2896

10. For those making application for a synthetic minor or major source operating permit, please summarize each pollutant emitted and the emission rate for the pollutant. Indicate those pollutants for which the facility is major. **N/A**

Regulated pollutant	Potential Emissions* (tons/year)	Major source? yes/no

*Potential emissions are either the maximum allowed by the regulations or by permit, or, if there is no regulatory limit, it is the emissions that occur from continuous operation at maximum capacity.

11. For those applying for a major source operating permit, indicate the compliance status by program for each emission unit or source and the method used to determine compliance. Also cite the specific applicable requirement. **N/A**

Emission unit or source:_____

(description)

Pollutant[4]	Standard	Program[1]	Method used to determine compliance	Compliance Status	
				IN[2]	OUT[3]

[1]PSD, non-attainment NSR, NSPS, NESHAP (40 CFR Part 61), NESHAP (40 CFR Part 63), accidental release (112(r)),SIP regulation, Title IV, Enhanced Monitoring, Title VI, Other (specify)

[2]Attach compliance plan

[3]Attach compliance schedule (ADEM Form-114)

[4]Fugitive emissions must be included as separate entries

12. List all insignificant activities and the basis for listing them as such (i.e., less than the insignificant activity thresholds or on the list of insignificant activities). Attach any documentation needed, such as calculations. No unit subject to an NSPS, NESHAP or MACT standard can be listed as insignificant. **N/A**

Insignificant Activity	Basis

13. List and explain any exemptions from applicable requirements the facility is claiming: **N/A**

a.

b.

c.

d.

e.

f.

g.

h.

i.

14. List below other attachments that are a part of this application(all supporting engineering calculations must be appended):

a. **Field installation drawing**

b. **TANKS 4.0.9d Calculations**

c.

d.

e.

f.

g.

h.

i.

I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE.

I ALSO CERTIFY THAT THE SOURCE WILL CONTINUE TO COMPLY WITH APPLICABLE REQUIREMENTS FOR WHICH IT IS IN COMPLIANCE, AND THAT THE SOURCE WILL, IN A TIMELY MANNER, MEET ALL APPLICABLE REQUIREMENTS THAT WILL BECOME EFFECTIVE DURING THE PERMIT TERM AND SUBMIT A DETAILED SCHEDULE, IF NEEDED FOR MEETING THE REQUIREMENTS.

Chuck Stewart  11-18-05

SIGNATURE OF RESPONSIBLE OFFICIAL DATE

PUBLIC - ADEM FORM 105

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
AIR DIVISION

INSTRUCTIONS FOR COMPLETION OF MANUFACTURING OR PROCESSING OPERATION FORM ADEM 105

All applicable portions of this form should be completed by printing or typing. When any item is not applicable, the letters "NA" should be placed in the left margin beside the item. If the entire Form ADEM 105 is not applicable to your plant or facility, items 1 through 4 and the signature block should be completed and the words "NOT APPLICABLE" should be inserted beneath the signature block. At least one copy of this Form must be included in the group of initial permit applications for each facility or plant.

A separate copy of this Form is to be completed for each process, operation, machine or other source which has the potential for emission of contaminants to the atmosphere. Two or more pieces of equipment may be grouped as a single permit unit.

Items 1 & 2: Self-explanatory

Item 3: Identify the equipment as specific type; i.e., state "open hearth furnace", "electric arc furnace", etc., rather than the general term, "furnace". When two or more pieces of equipment are grouped as a unit, then the individual component of the unit must be identified. If the unit receives input material from, or provides input material to, another operation in your facility, the relationship should be made clear.

Item 4: Self-explanatory

Item 5: All raw materials input to the unit are to be identified, including solid fuels such as coal or coke. Exclude fuels for indirect heat exchangers; these are to be included on Form ADEM 104.

Item 6: Do not include those fuels used in indirect heat exchangers, for which Form ADEM 104 is provided.

Item 7: List all products, including intermediates used in other operations, and those which are not usable because they do not meet specifications.

Item 8: May be included as part of monitoring plan (if so, please indicate in space provided)

Item 9: If the answer to this item is "yes", the application will not be considered complete unless Form ADEM 110 is attached to Form 105.

Item 10: Each stack, vent, etc. which may emit air contaminants is to be separately identified with a number which is also used in Item 11. Stack height is that above ground level. Standard temperature is 70°F; standard pressure is 29.92 inches of Hg. Each air contaminant which is known or suspected to be emitted from each emission point is to be listed. The allowable emission specified in the Regulation must be stated. The Department must be assured that the owner or operator has a clear understanding of the allowable emission rate.

Item 11: If applications for more than one process are being submitted for a facility, the use of a single flow diagram for the entire facility is allowed. Use of one flow diagram is suggested for integrated operations. Points of air contaminant emissions are to be numbered to correspond with those points listed in Item 10.

Item 12: If the answer is no, then an ADEM 114 form should be attached.

Item 13: Self-explanatory

Item 14: This item is designed to determine if there are any fugitive dust problems associated with material handling of either the raw materials or finished products used in the process.

USE ADDITIONAL SHEETS IF NECESSARY

PERMIT APPLICATION
FOR
MANUFACTURING OR PROCESSING OPERATION

			-					-			

Do not write in this space

1. Name of firm or organization: **Sloss Industries Corporation, Ariton Facility**

2. Briefly describe the operation of this unit or process in your facility: (separate forms are to be submitted for each type of process or for multiple units of one process type. If the unit or process receives input material from, or provides input material to, another operation, please indicate the relationship between the operations.) An application should be completed for each alternative operating scenario.

   Operating scenario number **01**

   This process will manufacture one final product, Diphenyl Isophthalate (DPIP). It utilizes one reactor and its assocciated equipment. The reactants are charged into the reactor along with a solvent. DPIP, the desired product, is washed with water, centrifuged, dried and recovered. Solvent is recovered, using high efficiency condensers, for reuse in subsequent batches.

3. Type of unit or process (e.g., calcining kiln, cupola furnace): **Reactors, product receivers, storage tanks, and piping.**

   Make: **Dedtrich** Model: **1500 Gallon Glass Lined Reactor**

   Rated process capacity (manufacturer's or designer's guaranteed maximum) in pounds/hour: **N/A**

   Manufactured date: **Unknown** Proposed installation date: **existing equipment**

   Original installation date (if existing): **7-93** Reconstruction or Modification date (if applicable):

4. Normal operating schedule:

   Hours per day: **24** Days per week: **7** Weeks per year: **16**

   Peak production season (if any): **Fall Season**

5. Materials (feed input) used in unit or process (include solid fuel materials used, if any):

Material	Process weight average	Maximum (lb/hr)	Quantity tons/year
Isophthaloyl chloride	**lb**	**CONFIDENTIAL**	
Phenol	**lb**	"	
Toluene	**lb**	"	
50% Sodium Hydroxide	**lb**	"	
Water	**lb**	"	

6. Total heat input capacity of process heating equipment (exclude fuel used by indirect heating equipment previously described on Form ADEM-104): **N/A** MMBtu/hr

Fuel	Heat Content	Units	Max. % Sulfur	Max. % Ash	Grade No. [fuel oil only]	Supplier [used oil only]
Coal		Btu/lb				
Fuel Oil		Btu/gal				
Natural Gas		Btu/ft^3				
L. P. Gas		Btu/ft^3				
Wood		Btu/lb				
Other (specify)						

7. Products of process or unit:

Products	Quantity/year	Units of production
DPIP		

8. For each regulated pollutant, describe any limitations on source operation which affects emissions or any work practice standard (attach additional page if necessary): **N/A**

9. Is there any emission control equipment on this emission source?
   [ ] Yes **[X]** No (Where a control device exists, Form ADEM-110 must be completed and attached).

10. Air contaminant emissions by emission point: (each point of emission should be listed separately and numbered so that it can be located on the attached flow sheet). Fugitive emissions must be included.

Emission point	Pollutant	Potential emission rate (lbs/hr)	Potential emission rate (tons/yr)	Basis for Calculation	Regulatory emission limit (lbs/hr)	Regulatory emission limit (units of standard)	Stack: Height above grade (ft-in)	Stack: Base Elevation (ft)	Stack: Diameter (ft-in)	Exhaust volume (ACFM)	Exit temp. (°F)
DPIPT201 IPC/Tol Storage	**Toluene/ IPC**	**0.02**	**0.07**	**Tanks 4.0**	**N/A**		**16 ft**	**15 ft**	**2 in**	**0.08**	**Amb.**
DPIPR30 Crystallizer	**Toluene/ IPC**	**0.20**	**0.70**	**Tanks 4.0**	**N/A**		**N/A**	**N/A**	**N/A**	**1.0**	**Amb.**

Please indicate basis used in estimating emission rate; i.e. material balance, stack test, emission factors manual, etc., and append emissions calculations.

11. Using a flow diagram:

(1) Illustrate input of raw materials,

(2) Label production processes, process fuel combustion, process equipment and air pollution control equipment,

(3) Illustrate locations of air contaminant release so that emission points under item 10 can be identified.

(Attach extra pages as needed)

See Attachment 1

Process flow diagram

12. Is this unit or process in compliance with all applicable air pollution rules and regulations?

[X]yes ☐no

(if "no", a compliance schedule, Form ADEM-114 must be completed and attached.)

13. Does the input material or product from this process or unit contain finely divided materials which could become airborne?

[X]yes ☐no

14. If "yes", is this material stored in piles or in some other facility as to make possible the creation of fugitive dust problems?

☐ yes [X]no

List storage piles or other facility (if any): **N/A**

Type of material	Particle size (diameter or screen size)	Pile size or facility (average tons)	Methods utilized to control fugitive emissions (wetted, covered, etc.)

Name of person preparing application: **Charles A. Jones Coordinator, Environmental/Safety**

Signature: _____ Date: **11/18/05**

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
AIR DIVISION

INSTRUCTIONS FOR COMPLETION OF FORM ADEM-108
LOADING AND STORAGE OF ORGANIC COMPOUNDS

Cover page I08-a is self-explanatory

Section I: Bulk Storage Information

Section I is broken down into subparts (Ia, Ib, and Ic) to reflect the three major types of tanks: fixed roof, internal floating roof, and external floating roof. Data requested in each subpart is used in conjunction with equations for calculating volatile organic compound losses for each type of tank as found in EPA publication AP-42, Chapter 7.1 - Organic Liquid Storage Tanks (revised 1/95)

Most of the data requested is straightforward in nature, but to avoid some possible confusion, the following items will be further expounded upon:

THROUGHPUT:

The throughput is expressed per individual tank. Do not combine throughputs.

TANK CAPACITY:

Tank capacity should be expressed as effective working capacity. Some tanks cannot use the total potential capacity due to overfill alarm systems.

DECK FITTINGS

Specify exactly each of the 8 choices and give a number of each type of fitting. If the particular fitting is not applicable, then fill in N/A.

The information for bulk storage will not be considered complete unless the loading/unloading information is also complete. Both sections must be complete in order to perform emission calculations.

SECTION II
LOADING/UNLOADING INFORMATION

Item No. 1:	Type of product being loaded and/or unloaded.
Item No. 2:	How many gallons are transferred from storage tanks and loaded into a barge, truck, or other vessel? (Loading)
Item No. 3:	How many gallons are unloaded from a barge, truck, or other vessel and transferred into storage tanks? (Unloading)
Item No. 4:	How many gallons are received from a pipeline and transferred into storage tanks?
Item Nos. 5 - 8:	Self-explanatory.
Item No. 9:	Related to Item No. 2.
Item No. 9a:	Type of loading into a truck, barge, or other vessel.
Item No. 10:	How far is the fill pipe submerged into the liquid product?
Item No. 11:	If the answer to this item is yes, the application will not be considered complete unless Form ADEM – 110 is completed and attached.
Item No. 12:	The control efficiency of the vapor collection system (designed or manufacturer guaranteed).
Item No. 13:	Any pertinent facts not requested elsewhere are to be listed here.

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
AIR DIVISION

PERMIT APPLICATION FOR LOADING AND STORAGE OF ORGANIC COMPOUNDS

[ ][ ][ ] - [ ][ ][ ][ ] - [ ][ ][ ][ ]
Do not write in this space

Name of Firm or Organization: **Sloss Industries Corporation**

Plant Location: **Ariton Facility**

Permit Application is made for:

- [X] Existing Facility
- [X] Modification
- [ ] Other_____
- [ ] New Equipment
- [ ] Change in Location

Normal Schedule of Operation

Hours per day: **24**

Days per Week: **7**

Weeks per Year: **52**

Peak Season: **Oct. – Jan.**

For each regulated pollutant, describe any limitations on source operation which affects emissions or any work practice standard (attach additional page if necessary):

N/A

On a separate sheet sketch a map indicating the location of each storage tank and/or loading rack for which this application is made.

Name of Person Preparing this Application: **Charles A. Jones**

Title: **Coordinqator, Environmental/Safety**

Date: **November 18, 2005**

Telephone: **205-808-7712**

Signature:

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Section 1a
Bulk Storage Tank Information
Fixed Roof Tanks

Specify total number of fixed-roof tanks in this application: **2**

Existing Tank.The Toluene/IPC Storage Tank Contains a 50 % Mixture of Each Material.

ITEM NO.	Tank Data ⇓ Identification No.⇒	**Toluene/IPC Storage (50%) T-201**	**Toluene/ IPC Storage (50%) T-201**
1.	Product Stored: e.g. Crude Oil, Gasoline, Benzene, etc.	**toluene**	**isophthaloyl chloride (IPC)**
2.	Molecular weight of liquid in storage tank (lb/lb-mole)	92 lb/lb-mol	203 lb/lb-mol
3.	True vapor pressure of liquid at storage temperature (psia/°F)	0.43 @ 78F	0.00058 @ 78F
4.	If the tank is a pressure tank, give pressure vacuum vent setting (psig)	N/A	N/A
5.	Is tank underground or aboveground?	aboveground	aboveground
6.	Tank diameter (ft-inches)	12	12
7.	Average vapor space height (ft)	5	5
8.	Average ambient diurnal temperature	531.8 R	531.8 R
9.	Tank color-specify from below: Roof: A. White; B. Aluminum (Diffuse); C. Light gray; D. Medium gray Shell: A. White; B. Aluminum (Specular); C. Aluminum (Diffuse); D. Gray; E. Light gray; F. Medium gray	Roof **White** Shell **White**	Roof **White** Shell **White**
10.	Tank Capacity (gallons)	20,000	20,000
11.	Tank Throughput (gallons/year)	43,103	67,848
12.	Date Tank Installed	Nov. 2003	Nov. 2003
13.	Date Tank Manufactured	Unknown	Unknown
14.	Is tank equipped with vapor recovery system? Type (describe)*	No	No

15.	Indicate the regulation which applies to each tank	**<1.5 psia,** 40CFR 60, Subpart Kb Not Applicable; ADEM Sect. 6 335-3-6-.03 Not Applicable	**<1.5 psia,** 40CFR 60, Subpart Kb Not Applicable; ADEM Sect. 6 335-3-6-.03 Not Applicable
16.	Indicate the emissions for each tank and attach calculations	80.87 lbs/yr	0.29 lbs/yr

*if a vapor recovery system is or will be installed, please complete ADEM-110 form

Section 1b
Bulk Storage Tank Information
Fixed Roof Tanks

ITEM NO.	**Existing Tank. Wet Phenol, T-203**						
1.	90% Phenol, 10% water						
2.	94 lb/lb-mol						
3.	.0077 psig						
4.	N/A						
5.	Aboveground						
6.	8 ft.						
7.	2 ft.						
8.	536.5 R						
9.	Roof, Aluminum Diffise Shell, Aluminum Diffuse	Roof Shell	Roof Shell	Roof Shell	Roof Shell	Roof Shell	Roof Shell
10.	6350 gals.						
11.	13,700 gals.						
12.	March 2005-Existing DMSO2 Tank Replaced-In-Kind						
13.	Unknown						
14.	No						
15.	**<1.5 psia,** 40CFR 60, Subpart Kb Not Applicable; ADEM Sect. 6 335-3-6-.03 Not Applicable						

16.	34.43 lbs.						

Section 1b
Bulk Storage Tank Information
Internal Floating Roof Tanks

Specify total number of internal floating roof tanks in this application: **N/A**

ITEM NO.	Tank Data ⇓ **N/A** Identification No. ⇒		
1.	Product Stored: e.g. Crude Oil, Gasoline, Benzene, etc.		
2.	Seal Type (specify as one below) A. Liquid mounted resilient seal 1) Primary seal only 2) with rim mounted secondary seal B. Vapor mounted resilient seal 1) Primary seal only 2) with rim mounted secondary seal	A. B.	A. B.
3.	Average wind speed at tank site (mi/hr)		
4.	True vapor pressure of liquid at storage temperature (psia/°F)		
5.	Tank diameter(ft-inches)		
6.	Molecular weight of liquid in storage tank (lb/lb-mole)		
7.	Tank Capacity (gallons)		
8.	Tank Throughput (barrels/year)		
9.	Shell Condition A. light rust B. dense rust C. gunite lined		
10.	Average organic liquid density (lb/gal)		
11.	No. of columns if roof is column supported		
12.	Effective column diameter (ft) [column parameter ft/n]		
13.	Is tank equipped with vapor recovery system? Type (describe)*		

* A ADEM-110 form must be attached if a vapor recovery system is used.

Section 1b **N/A**

Bulk Storage Tank Information
Internal Floating Roof Tanks

ITEM NO.					
1.					
2.	A. B.	A. B.	A. B.	A. B.	A. B.
3.					
4.					
5.					
6.					
7.					
8.					
9.	A. B. C.	A. B. C.	A. B. C.	A. B. C.	A. B. C.
10.					
11.					
12.					
13.					

Section 1b
Bulk Storage Tank Information
Internal Floating Roof Tanks

ITEM NO.	Tank Data ⇓ **N/A** Identification No.⇒		
14.	Specify deck fitting type(s) and no. of each fitting from the following:		
	A. Access hatch 1) Bolted cover, gasketed 2) Unbolted cover, gasketed 3) Unbolted cover, ungasketed	A.	A.
	B. Automatic, gauge float well 1) Bolted cover, gasketed 2) Unbolted cover, gasketed 3) Unbolted cover, ungasketed	B.	B.
	C. Column Well 1) Built-up column-sliding cover, gasketed 2) Built-up column-sliding cover, ungasketed 3) Pipe column-flexible fabric sleeve seal 4) Pipe column-sliding cover, gasketed 5) Pipe column-sliding cover, ungasketed	C.	C.
	D. Ladder Well 1) Sliding cover, gasketed 2) Sliding cover, ungasketed	D.	D.
	E. Roof leg or hanger well 1) Adjustable 2) Fixed	E.	E.
	F. Sample pipe or well 1) Slotted pipe sliding cover, gasketed 2) Slotted pipe sliding cover, ungasketed 3) Sample well-slit fabric seal, 10% open area	F.	F.
	G. Stub drain, 1 inch diameter	G.	G.
	H. Vacuum breaker 1) Weighted mechanical actuation, gasketed 2) Weighted mechanical actuation, ungasketed	H.	H.
15.	Type of Deck: Bolted or Unbolted		
16.	If bolted, give deck construction method from the following:		
	A. Continuous Sheet (5 ft, 6 ft, or 7 ft wide)	A.	A.
	B. Panel Construction [give dimensions for width (ft) and length (ft)]	B.	B.
17.	Date tank installed		
18.	Date tank manufactured		
19.	Indicate the regulation which applies to each tank		
20.	Indicate the emissions for each tank and attach calculations		

Section 1b
Bulk Storage Tank Information
Internal Floating Roof Tanks

ITEM NO.	N/A			
14.	A. B. C. D. E. F. G. H.	A. B. C. D. E. F. G. H.	A. B. C. D. E. F. G. H.	A. B. C. D. E. F. G. H.
15.				
16.	A. B.	A. B.	A. B.	A. B.
17.				
18.				
19.				
20.				

Section 1c
Bulk Storage Tank Information
External Floating Roof Tanks

Specify total number of external floating roof tanks in this application: **N/A**

ITEM NO.	Tank Data ⇓ Identification No.⇒		
1.	Product Stored: e.g. Crude Oil, Gasoline, Benzene, etc.		
2.	Is tank welded or riveted?		
3.	Seal Type (specify as one below) A. Metallic shoe seal 1) Primary seal only 2) with shoe mounted secondary seal 3) with rim mounted secondary seal B. Liquid mounted resilient seal 1) Primary seal only 2) with rim mounted secondary seal C. Vapor mounted resilient seal 1) Primary seal only 2) with rim mounted secondary seal	A. B. C.	A. B. C.
4.	Average wind speed at tank site (mi/hr)		
5.	True vapor pressure of liquid at storage temperature (psia/°F)		
6.	Tank diameter(ft-inches)		
7.	Molecular weight of liquid in storage tank (lb/lb-mole)		
8.	Tank Capacity (gallons)		
9.	Tank Throughput (barrels/year)		
10.	Shell Condition A. light rust B. dense rust C. gunite lined		
11.	Average organic liquid density (lb/gal)		
12.	Is tank equipped with vapor recovery system? Type (describe)*		
13.	Date tank installed		
14.	Date tank manufactured		
15.	Indicate the regulation which applies to each tank		
16.	Indicate the emissions for each tank and attach calculations		

* If vapor recovery or other pollution control system is or will be installed, please complete and submit ADEM-110 form

Section 1c
Bulk Storage Tank Information
External Floating Roof Tanks

ITEM NO.	N/A				
1.					
2.					
3.	A. B. C.	A. B. C.	A. B. C.	A. B. C.	A. B. C.
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					

SECTION II
LOADING/UNLOADING INFORMATION

ITEM NO.	**Tank Data** ⇓ Identification No. ⇒	**T-201, Existing Tank**	**T-201, Existing Tank**
1.	Product loaded and unloaded*	**toluene**	**Isophthaloyl chloride (IPC)**
2.	Amount transferred from storage tanks, gal/day	166	101
3.	Amount transferred to storage tanks, gal/day	5000 gal./tank truck X Four tank trucks/yr = 20,000 gals./yr	3375 gal./tank truck X Four Tank trucks = 13,500 gals/yr
4.	Amount received from pipeline, gal/day	N/A	N/A
5.	Bulk temperature of the product	Ambient	Ambient
6.	True vapor pressure of liquid at storage temperature (psia/°F)	0.43 psia	0.00058 psia
7.	Molecular weight of the product, lb/lb-mole	92 lb/lb-mol	203 lb/lb-mol
8.	Density of the product at bulk temperature, lb/gal	7.25	11.85
9.	Type of loading: vessel, barge, truck, other (specify)	truck	truck
9a.	Type of filling: submerged, splash, top filling, bottom filling, other (specify)	Top filling	Top filling
10.	If submerged fill is used, what approximate percent is the fill pipe submerged?	N/A	N/A
11.	Is loading/unloading operation equipped with vapor recovery or other pollution control system? (specify)**	No	No
12.	Efficiency of vapor collection system	N/A	N/A
13.	Provide additional information which might be helpful for evaluation	N/A	N/A

* Crude oil, gasoline, naphtha, jet fuel (JP-4), kerosene, distillate fuel, other (specify)

** If vapor recovery or other pollution control system is or will be installed, please complete and submit ADEM-110 form

SECTION II
LOADING/UNLOADING INFORMATION

ITEM NO.	Wet Phenol Storage				
1.	**Phenol**				
2.	104 Gal/day				
3.	4 tank trucks/yr= 20,000 gal/yr				
4.	N/A				
5.	Ambient				
6.	0.0077 psia				
7.	96 lb/lb-mol				
8.	8.94 lb/gal				
9.	Truck				
9a.	Top filling				
10.	N/A				
11.	No				
12.	N/A				
13.	N/A				